Application No. 10/805,770

Reply to Office Action of May 28, 2010

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A porous film of a solar cell, comprising:

a film having a front face and a back face, the film including a plurality of layers,
each layer having a first kind of particles of one average diameter or length, and all but one
layer having a second kind of particles, wherein in each of the layers having the second kind
of particles, either

(i) the average diameter or length of the second kind of particles is the same in each layer and the amount of the second kind of particles present in each layer varies from layer to layer, or

(ii) the amount of the second kind of particles present in each layer is the same in each layer and the average diameter or length of the second kind of particles varies from layer to layer at least a first layer and a second layer, the first layer having only a first kind of particles of one average diameter or length, and the second layer having the first kind of particles and additionally a second kind of particles, the second kind of particles having a larger average diameter or length than the first kind of particles,

wherein, where the amount of the second kind of particles present in each layer varies from layer to layer, it increases from layer to layer, and where the average diameter or length of the second kind of particles present in each layer varies from layer to layer, it increases from layer to layer, wherein the one layer having only the first kind of particle is adjacent to said front face,

wherein said porous film has a <u>continuous</u> gradient of light scattering strength extending from said front face to said back face, with the light scattering strength increasing towards said back face, wherein said gradient of light scattering strength starts with zero light scattering at said front face.

Claims 2-5 (Canceled).

Claim 6 (Previously Presented): The porous film according to claim 1, wherein said particles have a shape selected from the group consisting of rods, tubes, cylinders, cubes, parallelipeds, spheres, balls and ellipsoids.

Claim 7 (Previously Presented): The porous film according to claim 1, wherein said particles are selected from the group consisting of semi-conducting material particles, metal particles and insulating particles.

Claim 8 (Currently Amended): The porous film according to claim 1, wherein the first and second plurality of layers have been applied subsequently.

Claim 9 (Currently Amended): The porous film according to claim 8, wherein the first and second plurality of layers have been applied subsequently by a technique selected from the group consisting of screen printing, doctor blading, drop casting, spin coating, sol gel process and lift-off techniques, and any combination of the aforementioned techniques.

Claim 10 (Previously Presented): The porous film according to claim 1, wherein the first kind of particles have an average diameter in the range of from 2 nm to 25 nm, preferably from 3 nm to 20 nm, or they have an average length of from 3 nm to 300 nm, preferably from 10 nm to 100 nm.

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Claim 11 (Previously Presented): The porous film according to claim 1, wherein the second kind of particles have an average diameter or length in the range of from 50 nm to 1 µm, preferably from 100 nm to 500 nm, more preferably from 200 nm to 400 nm.

Claims 12-19 (Canceled).

Claim 20 (Previously Presented): An electronic device comprising a porous film according to claim 1.

Claim 21 (Previously Presented): An electronic device according to claim 20, which is a solar cell.

Claim 22 (Previously Presented): A solar cell according to claim 21, further comprising a reflective back electrode.

Claim 23 (Previously Presented): A solar cell according to claim 21, further comprising a light confinement layer.

Claim 24 (Previously Presented): A solar cell according to claim 21, further comprising an electrolyte.

Claim 25 (Withdrawn): A method of forming a porous film having a gradient of light scattering strength across its thickness, comprising the steps:

- a) providing a first kind of particles having one average diameter or length,
- b) providing a second kind of particles,

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c) providing a substrate,

d) applying onto said substrate a plurality of layers, each layer having said first kind

of particles of one average diameter or length, and all but one layer having said second kind

of particles, wherein in each of said layers having a second kind of particles, either

(i) the average diameter or length of said second kind of particles is the same in each

layer and the amount of said second kind of particles present in each layer varies from layer

to layer,

or

(ii) the amount of said second kind of particles present in each layer is the same in

each layer and the average diameter or length of said second kind of particles varies from

layer to layer.

Claim 26 (Withdrawn): A method according to claim 25, characterized in that, where

the amount of said second kind of particles present in each layer varies from layer to layer,

said amount increases from layer to layer, and, where said average diameter or length of said

second kind of particles present in each layer varies from layer to layer, said average diameter

or length increases from layer to layer.

Claim 27 (Withdrawn): The method according to claim 25, characterized in that steps

a), b) and c) can be in any order.

Claim 28 (Withdrawn): The method according to claim 25, characterized in that the

application of said plurality of layers occurs by a technique selected from the group

comprising screen printing, doctor blading, drop casting, spin coating, sol gel process, and

lift-off techniques, and any combination of the aforementioned techniques.

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Claim 29 (Withdrawn): The method according to claim 25, characterized in that each layer is applied separately.

Claim 30 (Withdrawn): The method according to claim 29, characterized in that after application of a layer there is a drying step.

Claim 31 (Withdrawn): The method according to claim 25, characterized in that the porous film is sintered after all layers have been applied.

Claim 32 (Withdrawn): A porous film produced by the method according to claim 25.

Claim 33 (Withdrawn): Use of a porous film according to claim 32 in an electronic device, in particular a solar cell.

Claim 34 (Withdrawn): An electronic device comprising a porous film according to claim 32.

Claim 35 (Cancelled)